

ABSTRACT

A method of in-channel estimation of the OSNR of an optical signal comprising a series of transmitted data units, each data unit having one of a discrete set of different amplitudes, the method comprising:

- 5 a) selecting a portion of the signal;
 - b) measuring, at least once, at least an indication of the selected portion of the signal;
 - c) repeating selecting a portion of the signal, and measuring; and
 - d) estimating the OSNR from the results of at least one of the measurements;
- 10 wherein consecutive measurements begin at times which differ by more than a shortest interval from one data unit to the next data unit.